

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/655,854
	Filing Date	September 5, 2003
	First Named Inventor	Rafael Reif
	Art Unit	2826
	Examiner Name	Leonardo Andujar
Total Number of Pages in This Submission	Attorney Docket Number	MIT-136AUS

RECEIVED  
CENTRAL FAX CENTER  
MAR 31 2005

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC Appeal Notice, Brief, Reply Brief <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): PTO/SB/08A with Sixteen (16) References Cited Copy of PCT/US 03/41559 ISR Copy of PCT/US 03/41557 ISR
Remarks In the event a petition for extension of time is required by this paper and not otherwise provided, such petition is hereby made and authorization is provided herewith to charge deposit account No. 50-0845 for the cost of such extension.		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Name	Daly, Crowley, Mofford & Durkee LLP	
Signature		
Printed name	Christopher S. Daly	
Date	March 31, 2005	Reg. No. 37,303

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:	
Signature	
Typed or printed name	Christopher S. Daly
Date	March 31, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTX-9199 and select option 2.

Incomplete  
missing pages  
38 - 122

- Received: 37 pages CH

BEST AVAILABLE COPY

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/655,854  
Applicant : Rafael Reif, et al.  
Filed : September 5, 2003  
T.C./A.U. : 2826  
Examiner : Leonardo Andujar

Confirmation No.: 7254

RECEIVED  
CENTRAL FAX CENTER  
MAR 31 2005

Docket No. : MIT-136AUS  
Customer No. : 022494

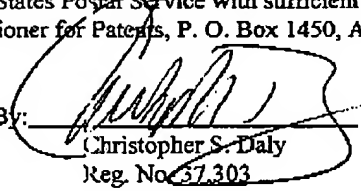
Certificate of Mailing (37 C.F.R. 1.8(a))

I hereby certify that this correspondence is being transmitted via facsimile to Commissioner for Patents at 703-872-9306 or deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date set forth below.

31 MAR 05

Date of Signature  
and Mail Deposit

By:

  
Christopher S. Daly  
Reg. No. 37,303

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

It is desired to cite for the record in this application the enclosed documents listed on the attached copy of PTO form PTO/SB/08A (Formerly #1449). The paragraph(s) marked below are applicable to this Information Disclosure Statement.

☒ (1) The enclosed Information Disclosure Statement is being filed: within three months of the filing date; or within three months of the entry of the national stage of the above-identified application; or before the mailing of a first Office Action on the merits; or before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. §1.114. Accordingly, Applicant(s) believes that no fee or statement is required.

Application No.:10/655,854

Attorney Docket No.: MIT-136AUS

[ ] (2) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by the fee set forth in 37 C.F.R. § 1.17(p).

SUBMISSION UNDER 37 C.F.R. § 1.97(c)

INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(1)

[ ] (3) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by a statement under 37 C.F.R. § 1.97(e)(1). The undersigned hereby states that each item of information contained in the attached Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application mailed not more than three months prior to the filing of the accompanying Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(c)

INCLUDING A STATEMENT UNDER 37 C.F.R. § 1.97(e)(2)

[ ] (4) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by a statement under 37 C.F.R. § 1.97(e)(2). The undersigned hereby states that no item of information contained in the accompanying Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the accompanying Information Disclosure Statement was known to any individual having a duty of disclosure as set forth in 37 C.F.R. § 1.56 (c) more than three months prior to the filing of the accompanying Information Disclosure Statement.

Application No.:10/655,854

Attorney Docket No.: MIT-136AUS

SUBMISSION UNDER 37 C.F.R. § 1.97(c)INCLUDING STATEMENTS UNDER 37 C.F.R. §§ 1.704(d) AND 1.97(e)(1)

[ ] (5) Pursuant to 37 C.F.R. § 1.97(c), the enclosed Information Disclosure Statement is being filed before the mailing date of a final action or a notice of allowance and is accompanied by statements under 37 C.F.R. §§ 1.704(d) and 1.97(e)(1). The undersigned hereby states that each item of information contained in the attached Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application mailed not more than three months prior to the filing of the accompanying Information Disclosure Statement and was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the accompanying Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(d)INCLUDING A STATEMENT UNDER 37 C.F.R. §1.97(e)(1)

[ ] (6) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by a statement under 37 C.F.R. § 1.97(e)(1) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that each item of information contained in the accompanying Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement.

SUBMISSION UNDER 37 C.F.R. § 1.97(d)INCLUDING A STATEMENT UNDER 37 C.F.R. §1.97(e)(2)

[ ] (7) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by a statement under 37 C.F.R. § 1.97(e)(2) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that no item of information contained in the accompanying Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the accompanying Information Disclosure Statement was known to any individual having a duty of disclosure as set forth in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the accompanying Information Disclosure Statement.

Application No.:10/655,854

Attorney Docket No.: MIT-136AUS

SUBMISSION UNDER 37 C.F.R. § 1.97(d)INCLUDING STATEMENTS UNDER 37 C.F.R. §§ 1.704(d) AND 1.97(e)(1)

[ ] (8) Pursuant to 37 C.F.R. § 1.97(d), the enclosed Information Disclosure Statement is being filed on or before payment of the issue fee and is accompanied by statements under 37 C.F.R. §§ 1.704(d) and 1.97(e)(1) and the fee required under 37 C.F.R. § 1.17(p). The undersigned hereby states that each item of information contained in the attached Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application mailed not more than three months prior to the filing of the accompanying Information Disclosure Statement and was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the accompanying Information Disclosure Statement.

The filing of this Information Disclosure Statement is not a representation by the undersigned as to personal knowledge of the contents of every word or phrase of the material enclosed or that reliance on other suitably trained professionals has not been made.

If a search report of a searching agency is enclosed identifying the nature of the relevance of each document, such a designation is deemed to satisfy Rule 98(a) (3) even if in a foreign language, since the few terms of relevance therein are deemed of universal cognizance. However, Applicant(s) does not necessarily adopt the position reflected by that report.

Application No.:10/655,854

Attorney Docket No.: MIT-136AUS

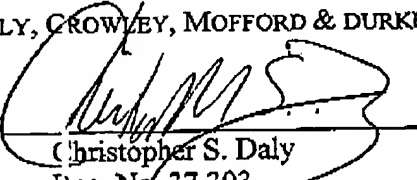
The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

Dated: 31 March

Respectfully submitted,

DALY, CROWLEY, MOFFORD & DURKEE, LLP

By:

  
Christopher S. Daly

Reg. No. 37,303

Attorney for Applicant(s)

275 Turnpike Street, Suite 101

Canton, MA 02021-2354

Tel.: (781) 401-9988, ext. 11

Fax: (781) 401-9966

[csd@dc-m.com](mailto:csd@dc-m.com)

\\server01\client\_files\Prolaw documents\MIT-136AUS\8537.doc

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/655,854
Filing Date	September 5, 2003
First Named Inventor	Rafael Reif
Art Unit	2826
Examiner Name	Leonardo Andujar
Attorney Docket Number	MIT-136AUS

Sheet 1 of 2

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 5,236,118	08/17/1993	Bower et al.	
		US- 5,270,261	12/14/1993	Bertin et al.	
		US- 5,370,301	12/06/1994	Belcher et al.	
		US- 5,391,257	02/21/1995	Sullivan et al.	
		US- 5,563,084	10/08/1996	Ramm et al.	
		US- 5,669,545	09/23/1997	Pham et al.	
		US- 5,985,693	11/16/1999	Leedy	
		US- 6,027,958	02/22/2000	Vu et al.	
		US- 2002/0135075	09/26/2002	Leedy	
		US- 6,465,892	10/15/2002	Suga	
		US- 2004/0124538	07/01/2004	Reif et al.	
		US- 2004/0219765	11/04/2004	Reif et al.	
		US- 2004/0126994	07/01/2004	Reif et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> -Number <sup>3</sup> -Kind Code <sup>4</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
		EP 1 041 624 A1	10/04/2000	Interuniversitair Microelektronica Centrum (UMC)		
		DE 100 47 963 A 1	03/29/2001	Sony Corp.		
		EP 1 432 032 A2	06/23/2004	Sol Semiconductors Energy Ltd.		

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 909. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.4. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (02-03)

Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<b>Complete if Known</b>			
		Application Number	10/655,854		
		Filing Date	September 5, 2003		
		First Named Inventor	Rafael Reif		
		Art Unit	2826		
		Examiner Name	Leonardo Andujar		
Sheet	2	of	2	Attorney Docket Number	MIT-136AUS

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		PCT/US 03/41559 International Search Report dated March 11, 2005	
		PCT/US 03/41557 International Search Report dated March 16, 2005	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEE: OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**